



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,896	08/09/2001	Jacoby M. Thwaites	498.02	6500
7590	02/22/2005			
EXAMINER				
WINDER, PATRICE L				
			ART UNIT	PAPER NUMBER
			2145	
DATE MAILED: 02/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/925,896	THWAITES, JACOBY M.
	Examiner Patrice Winder	Art Unit 2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bracho et al., EP 0 806 731 A2 (hereafter referred to as Bracho).
3. Regarding claim 1, Bracho taught an information routing system for an integrated data network (abstract), comprising:

a plurality of blocks each coupled to an information router, wherein each block is registered in the information router (publishers and subscribers, page 3, lines 51-58), and

wherein at least one of the blocks issues an information request (subscription, page 7, lines 7-11), and

wherein the information router is adapted to fulfill the information request by forming and exchanging a proper dataset on the basis of information provided by and information processed by the blocks (publish, page 10, lines 35-42; page 13, lines 3-8, 33-35, 44-48).

4. Regarding dependent claim 2, Bracho taught the information router processes each unit of information it handles as a field within a dataset, and wherein the dataset is

uniquely identified and associated with the block first responsible for providing a field (page 10, lines 43-47; page 11, lines 25-35, 42-47), and

whereby on receipt of the information request including a field identifier (page 7, lines 7-11), the information router operates to match a requested field with a proper dataset having at least one field corresponding to the requested field and selected from an available dataset (page 12, line 57 – page 13, line 2; page 13, lines 11-22).

5. Regarding dependent claim 3, Bracho taught the information router processes each unit of information it handles as a field within a dataset, and wherein the dataset is uniquely identified and associated with the block first responsible for providing a field (page 10, lines 43-47; page 11, lines 32-35, 42-47), and

whereby on receipt of the information request including a field identifier, the information router operates to match a requested field with a proper dataset having at least one field corresponding to the requested field and selected from a newly created dataset (event type, page 12, lines 44-56, page 13, lines 3-8, 33-38).

6. Regarding dependent claim 4, Bracho taught each block is a functional element in an integrated data network, and wherein each block is registered in the information router, and wherein at least one of the blocks is registered as an information-processing element capable of producing at least one output field when provided with at least one input field (page 3, line 59 - page 4, line 3; page 4, lines 44-47), and

wherein the information router is programmed to register such capability in the form of an exchange dataset for each block with such capability specifying the input and the output fields for each such block, and wherein the information router operates to

form an aggregate dataset of at least one field from an available dataset and at least one exchange dataset so as to enable the fulfillment of the information request (page 13, lines 26-32; page 11, lines 1-3).

7. Regarding dependent claim 5, Bracho taught each block is a functional element in an integrated data network, and wherein each block is registered in the information router, and wherein at least one of the blocks is an information-providing element capable of providing a dataset comprising at least one field (page 10, lines 43-47; page 11, lines 32-35, 42-47), and

wherein the information router operates to form an aggregate dataset of at least one field from the said dataset and at least one field from another dataset so as to enable the fulfillment of the information request (page 13, lines 26-32; page 11, lines 1-3).

8. Regarding dependent claim 6, Bracho taught the aggregate dataset is obtained by forming at least one new dataset (page 10, line 58 - page 11, line 3).

9. Regarding dependent claim 7, Bracho taught the aggregate dataset is obtained by using an existing dataset (page 10, line 58 - page 11, line 3).

10. Regarding dependent claim 8, Bracho taught the information request includes a unique identifier and attributes which are used to prioritize the fulfillment of information requests in the information router (page 7, lines 4-11; page 10, line 53 - page 11, line 3).

11. Regarding claim 9, Bracho taught an information routing system (abstract), comprising:

a plurality of blocks, wherein each block is a functional element in an integrated

data network (publishers and subscribers, page 3, lines 51-58), and wherein at least one of the blocks issues an information request based on its requirement to receive information from at least one other block (subscription, page 7, lines 7-11), and

an information router coupled to the blocks, comprising at least one computer processor programmed to manage an exchange of at least one unit of information between the blocks in order to fulfill the information request (publish, page 10, lines 35-42, page 13, lines 3-8, 33-35, 44-48),

wherein each block is registered in the information router, some of the blocks being capable of functioning as information-providing elements and some of the blocks being registered as information-processing elements (page 10, lines 42-47), and

wherein the information router processes each unit of information it handles as a field within a dataset which is uniquely identified and associated with the block first responsible for providing a field (page 11, lines 25-35, 42-47), and

whereby on receipt of the information request, the information router operates to match a requested field with a proper data set having at least one field corresponding to the requested field and selected from an available dataset (page 12, line 57 – page 13; line 2, page 13, lines 11-22).

12. Regarding dependent claim 10, Bracho taught at least one block is an information-processing element capable of producing at least one output field when provided with at least one input field, and wherein the information router is programmed to record such capability in the form of an exchange dataset for each block with such capability specifying the input and the output fields for each such block (page 3, line 59

– page 4, line 3; page 4, lines 44-47), and wherein the information router operates to form an aggregate dataset of at least one field from an available dataset and at least one exchange dataset so as to enable the fulfillment of the information request (page 13, lines 26-32; page 11, lines 1-3).

13. Regarding dependent claim 11, Bracho taught at least one block is an information-providing element capable of providing a dataset comprising at least one field (page 12, lines 6-9), and wherein the information router operates to form an aggregate dataset of the at least one field from the said dataset and at least one field from another dataset so as to enable the fulfillment of the information request (page 13, lines 26-32; page 11, lines 1-3).

14. Regarding dependent claim 12, Bracho taught each information request specifies an information request value, and wherein the information router uses the information request value as a factor in determining whether to fulfill the information request (page 10, line 58 – page 11, line 19).

15. Regarding dependent claim 13, Bracho taught each exchange dataset specifies an exchange dataset cost, and wherein the information router uses the exchange dataset cost as a factor in determining whether to fulfill the information request (page 11, lines 32-47).

16. The language of claims 14-20 is substantially the same as previously rejected claims 1-13, above. Therefore, claims 14-20 are rejected on the same rationale as previously rejected claims 1-13, above.

***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Hastings et al., USPN 6,182,143 B1: taught a publish/subscribe broker system that uses a hierarchical (i.e. tree structure) of distribution agents to forward subject-specific messages from publisher application to requesting subscriber applications;
  - b. Bolam et al., USPN 6,202,093 B1: taught a publish/subscribe broker system that can decide to publish messages only to subscribers that are directly connected to the respective broker by designating the message "local"; and
  - c. Todd, USPN 6,510,429 B1: taught a message broker system which receives an incoming stream of messages from a sender application, each message is a tuple having at least one field, collates the incoming stream with data stored in a database and provides a resultant stream of messages to at least one receiving application.
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is 571-272-3935. The examiner can normally be reached on Monday-Friday, 10:30 am-7:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571-272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrice Winder  
Primary Examiner  
Art Unit 2145

February 18, 2005